

What is claimed is:

1. A control lever safety apparatus for a heavy equipment, comprising:
a consol box which is tiltably installed at one side surfaces of a driver's seat
and has control lever for operating a work apparatus;

5 a safety lever which is rotatably fixed to a first support to which the consol is
fixed;

a consol box tilting lever which is rotatably fixed to the first support;

an operation switch assembly which is rotatably connected with a joint
member fixed to a first support to be link-moved with the consol box tilting lever
10 and horizontally supports the safety lever and disconnects a power of a first limit
switch connected with the control lever by downwardly tilting the safety lever when
the consol box tilting lever is rotated; and

a latch assembly which is connected to a rod connected with a joint method
on the basis of a link movement method and disconnects a power of a second limit
15 switch disconnected with the control lever by tilting the consol box in an upper
direction when the consol box tilting lever is rotated, in such a manner that a latch
fixed to the first support is detachably engaged to the second support in which a
driving seat is fixed.

20 2. The apparatus of claim 1, wherein in the case that at least one of the first
and second limit switches is disconnected, an electrical signal supplied to the
control lever is disconnected.

3. The apparatus of claim 1, wherein a lifting and lowering means adapted to
25 lift and lower the consol box includes:

a handle shaft which is fixed to a bracket formed in a side surface of the
second support and has an adjusting knob formed in one end of the same and has a

threaded portion in an outer surface; and

a pair of link members which are adapted to adjust the height of the control lever in such a manner that each hinge connection portion is engaged to a threaded portion of the handle shaft, and the rotary shaft formed in a front side of the second support is lifted and lowered about a hinge shaft formed in a rear side of the second support as a center axis in a rotation direction of the handle shaft.

4. The apparatus of claim 1, wherein said operation switch assembly includes:

a first joint which has one end hinged to a lower portion of the consol box tilting lever and is fixed to the first support;

a second joint which has one end hinged to the other end of the first joint and has an elongated hole in the other end of the same;

a locking shaft which is engaged to the elongated hole and is connected to a lever adapted to turn on and off the power of a first limit switch; and

an elastic member which supports the locking shaft in order for the power of the first limit switch to maintain an on state and maintains the safety lever in a horizontal direction as an initial state based on an elastic bias operation.

5. The apparatus of claim 1, wherein said latch assembly includes:

a first latch which is hinged to the other end of a rod and is rotatably fixed to a second support in which a driver's seat is engaged;

a second latch which has a locking groove detachably engaged to the locking shaft fixed to the second support and is rotatably fixed to the second support;

an elastic member which closely contacts the second latch to an outer surface of the first latch and engages the locking groove with respect to the second latch based on an elastic bias operation as an initial state; and

a gas spring which is fixed to the second support and the first support and escapes the second latch from the locking shaft based on a movement of the rod when the consol box tilting lever is rotated and turns off the power of the second limit switch.

5

6. A control lever safety apparatus for a heavy equipment, comprising:

a consol box which is installed at one side surfaces of a driver's seat and has a control lever for operating a work apparatus;

a first limit switch which is connected with the control lever;

10 a safety lever which is rotatably fixed to a first support to which the consol box is fixed;

a locking shaft which is connected with a lever adapted to turn on and off the power of the first limit switch; and

15 an elastic member which supports the locking shaft in order for the power of the first limit switch to maintain an on state and maintains the safety lever in a horizontal direction based on an elastic bias operation as an initial state thereby disconnecting a power of a first limit switch by rotating the locking shaft when the safety lever is rotated.

20 7. The apparatus of claim 1, wherein said operation switch assembly includes:

a first joint which has one end hinged to a lower portion of the consol box tilting lever;

a second joint which is hinged to the other end of the first joint;

25 a catch plate which is hinged to the other end of the second joint and has a locking groove in one side of the same;

a locking shaft which is engaged to the locking groove and maintains a safety lever in a horizontal state; and

an elastic member which engages the locking shaft to the locking groove and maintains the safety lever in a horizontal state based on an elastic bias operation as an initial state in order for the power of the first limit switch to maintain an on state.

5

8. The apparatus of claim 1, wherein said safety lever, consol box tilting lever, operation switch assembly and latch assembly are fixed to an additional support which is rotatably fixed to a support in which a driver's seat is engaged.